

2022 international annual congress of the DGZI

New directions in oral implantology: Where is the journey taking us?

Dr Georg Bach, Germany

In the 52nd year of its existence, the oldest European professional society for implantology, the German Association of Dental Implantology (DGZI), is continuing to break new ground with a view to the future, organisational modernity, attractiveness of content and a new form of presentation. Presented by 50 speakers and attended by a good 250 participants—the move to a new hotel necessitated by the cancellation of the original hotel did not allow for more—75 table clinics and livestreaming of two surgical tutorials were the focus on Friday, the first day of the congress, whereas Saturday was all about science.

Future podium: “Young Generation DGZI”

The first highlight of the congress was three lectures with completely different orientations that together drew a clear picture of the future options of our field and indeed of the whole spectrum of dentistry. Their target group was also clearly defined: the younger generation of implantologists. The series of lectures started with Dr Jochen Tunkel speaking on a peripheral area of our discipline: whether social media is important for the implantology practice. The practice's goal in using social media should be patient acquisition and quick communication of information to patients. In addition, it can be used to create a modern image for the practice. In conclusion, he emphasised that the use of social media is essential for implantology practices and an indispensable tool for staff recruitment.

Dr Eik Schiegnitz then reported on the latest on augmentation and soft-tissue management to great enthusiasm from the auditorium. Starting with inlay techniques, Dr Schiegnitz moved on to block onlay techniques. His clinic has almost completely abandoned the use of the classic block in favour of the particulate onlay technique. His lectures are an explosion of information, so one has to really pay attention to catch all the details. One of these was the statement—based on a soon to be published

guideline—that there is no evidence whatsoever for the use of platelet-rich fibrin in augmentation surgery.

In the third lecture, Dr Sigmar Schnutenhaus discussed the role and importance of aligner therapy in implantology. A high number of excellently documented case studies proved that the relatively new aligner therapy is of great importance in solving complex patient cases. In his very practice-oriented lecture, Dr Schnutenhaus described aligner therapy carried out as part of treatment prior to implant placement as indispensable for numerous implantological issues, whether for the straightening of a tilted distal molar to optimise a gap situation, resolution of crowding or tooth rotations.

In the subsequent podium discussion, the congress participants had the opportunity to engage with the speakers. The depth of the discussion and the number of questions confirmed that the three speakers had been well chosen for the future podium. It was also pleasing to see the large number of younger colleagues in the auditorium, who fuelled the discussion with numerous questions and had their pictures taken with the speakers afterwards to make the first social media posts of the congress.





Admission of the DGZI to the DGZMK

DGZI President Dr Georg Bach promised the auditorium a special moment after the first session had ended, and indeed the congress participants witnessed a historic occasion: the DGZI's admission as an associate affiliate to the Deutsche Gesellschaft für Zahn-, Mund- und Kieferheilkunde (DGZMK; German society for dental, oral and maxillofacial medicine), the umbrella society for all German dental societies. President-Elect Prof. Jörg Wiltfang presented the acceptance certificate, saying that he was pleased that the significant strengthening of the DGZMK with the admission of the DGZI, including more than 4,000 new DGZI members, who are now also members of the DGZMK, has brought the DGZMK a considerable step closer to its goal of German dentistry speaking with a unified and strong voice. Dr Bach emphasised how important and significant it was for the DGZI to be part of the DGZMK family of values.

Surgical tutorials

It was then time to put what had been learned into practice. Livestreaming of surgical tutorials enabled congress participants to experience a unique insight into the work of renowned colleagues. The first of these was given by Dr Puria Parvini, who addressed immediate implant placement and immediate restoration in the aesthetic zone. After a journey of three cancelled flights, 12 hours of waiting time and ultimately arrival by train, Dr Parvini launched immediately into an intense lecture, in which he

pointed out the high number of anterior tooth traumas. His method of backing up his statements with short films was fascinating. By the third video, it was obvious how much progress has been made in the field of immediate restoration and immediate implantation.

Dr Mauro Marincola presented the implantological options for a less stressful procedure for the patient, speaking on minimally invasive implantology in cases of greatly reduced bone volume. He too was a victim of the travel chaos during the congress weekend, arriving just in time. Dr Marincola explained that the treatment concept he advocates, which he has been applying for 35 years, is highly evidenced. His preferred system is the Bicon system, which enables a short treatment time in combination with a non-invasive procedure. Between the plateau-shaped press-fit implants placed subcrestally are spaces which he defines as healing chambers. The abutments are not screwed in, but cold welded by tapping, which is intended to ensure a bacteria-tight closure.

The second day of the congress: Science day

Leading on from the strong practical orientation of first day, the second day focused on scientific aspects. Starting with a review of current trends, the question of what the future of implant dentistry will look like was also addressed. The DGZI congress organisers again pursued the goal of presenting development directions and visions. The sessions were presented in three main themes.

Bone regeneration concepts

Three papers covered this theme in a very insightful morning session that concluded with a speaker and podium discussion. When it comes to questions about bone and implants, there can really only be one speaker: Prof. Peer Kämmerer spoke about the latest in this re-



Fig. 1: From left to right: Dr Rolf Vollmer (First Vice President of the DGZI), Dr Elhassan Mohammad Nour, Dr Hisham Abueljebain, Dr Ahmed Fadl and DGZI President Dr Georg Bach. **Fig. 2:** The Table Clinics.



gard. His opening statement was surprising: the current S2k guideline on implantological indications for the use of bone substitute materials of the Association of the Scientific Medical Societies of Germany requires revision. Regarding this claim—supported by numerous case studies—Prof. Kämmerer first addressed the diseases and external factors that have a direct influence on bone metabolism. His remarks focused on the biological potential of the area to be augmented. His take-home message was that much is possible, but biology cannot be outsmarted!

On the topic of minimally invasive versus augmentative treatment, Dr Keyvan Sagheb presented the “Mainz concept” for avoiding augmentation. It considers preoperative risk stratification and the situation before a defect arises and after it has arisen. With immediate implantation, a later defect can be avoided, and it is therefore the method of choice if all the conditions are met. However, in the case of a defect, short and narrow implants can be an alternative to avoid augmentation. For patients, these offer an attractive choice, as the treatment time is shortened and treatment is much less invasive, but for the practitioner, these options are as complex as conventional ones in terms of handling owing to their sensitivity to technology.

Prof. Florian Stelzle next presented his box technique as the basis for successful bone augmentation. He too high-

lighted the practitioner’s and patient’s points of view in decision-making, as well as added that of the team, regarding the need to minimise treatment time and intensity. “In short, we need concepts for decision-making in support of the simplification and time reduction of treatment,” he said. These considerations, among others, led to the development of his decision path, or box: the assessment of the defect configuration, the defect relation and the time relation. Case studies using the box decision model demonstrated the advantages of decision-making in this way.

Prosthetic concepts

The midday session was dedicated to an area of debate on restoration in implantology: high-tech or simple prostheses? The lectures with very different focuses nevertheless complemented each other.

Dentist Dr Kay Vietor and dental technician Björn Roland described high-end implant prostheses and asked the question of whether digital emergence profiling is the new gold standard. The conventional use of an individualised impression coping that reflects the emergence profile achieved with the provisional restoration is costly and poses the risk of information loss according to Roland—Dr Vietor surprised the audience with the statement that considerable tissue collapse can be expected after only 5 minutes. Dr Vietor therefore also prefers to carry out the presentation and design of the emergence profile digi-





Figs. 3-7: Prof. Peer Kämmerer, Dr Keyvan Sagheb, Prof. Florian Stelzle, Prof. Mauro Marincola and Dr Jochen Tunkel (from left) were speakers at the 51st International Congress of the DGZI. **Fig. 8:** Dr Eik Schiegnitz (right) in discussion with DGZI President Dr Georg Bach after his lecture. **Fig. 9:** Dr Amely Hartmann's table clinics focused on the topic of implantation in the aesthetic zone in complex situations.

tally. However, Roland explained the need for the information provided by a physical impression in highly complex cases. The duo thus presented the solution and demonstrated it via case studies: an extra-oral emergence profile impression using the provisional restoration, followed directly by an intra-oral emergence profile scan, a scan with scan bodies and a scan of the emergence profile of the provisional restoration.

When dentists and dental technicians start sweating, something has usually not gone well—Dr Bach and dental technician Christian Müller reported on implant prosthetic troubleshooting. Whereas in the past collaboration between dental technician and dentist was mostly required towards the end of the prosthetic phase, today this is required in the case of classic late complications, when there are no more spare parts for an abandoned implant system, when the friction of an otherwise still usable superstructure wears off or when a patient presents with implants needing restoration, but the system cannot be identified. Numerous case studies underpinned the credo of these presenters: keep everything, throw nothing away, document everything and discuss every step with each other! The fact that some congress participants approached Müller with questions and requests immediately after the lecture demonstrates the relevance of the topic.

All about ceramic implants

This final session was a real highlight to round off the congress! Four well-known speakers illuminated the topic of ceramic implants with all its facets and demonstrated the extraordinary level of achievement in this field. Dr Stefan Röhling and his working group have contributed substantially to the currently available evidence on ceramic implants. Dr Röhling presented the most important findings from this wealth of knowledge and provided long-term evidence of the effectiveness of this new class of materials.

The author duo Prof. Jürgen Becker and Dr Nicole Rauch added further scientific facts and long-term experience. They agreed with Dr Röhling that ceramic implants are on a par with titanium implants in terms of their reliability and

safety and have considerable advantages with regard to the peri-implant soft tissue.

In the concluding speaker discussion, the immunological effects of implants made of titanium and zirconia played an important role. Dr Röhling in particular proved on the basis of numerous scientific studies that zirconia implants are clearly superior to those made of titanium in a certain proportion of our patients.

Conclusion

At the DGZI congress, participants were indeed able to experience an outstanding and innovative continuing education event—but not only that: an encouraging level of interaction was achieved from different perspectives of science, practice, politics and industry. With the attempt to pursue the urgent questions of what implantology will look like in five or perhaps ten years and what the political and economic framework conditions will be then, the DGZI broke new ground and prominent speakers from German-speaking dental implantology took to the stage. As a conclusion of this year's annual congress, it can be stated that the implant practice of the future, in addition to scientific and technological aspects, should focus on strategic questions and answers. The DGZI will continue to work actively on this topic and on this claim, thus demonstrating the importance and appeal of this professional society in the years to come.

Next year's congress will take place on 6 and 7 October in Hamburg.



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